



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,078	06/25/2003	Rodney A. Kendall	FIS920030065	1077

32074 7590 10/06/2004

INTERNATIONAL BUSINESS MACHINES CORPORATION
DEPT. 18G
BLDG. 300-482
2070 ROUTE 52
HOPEWELL JUNCTION, NY 12533

EXAMINER

MACARTHUR, VICTOR L

ART UNIT	PAPER NUMBER
----------	--------------

3679

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/604,078

Applicant(s)

KENDALL ET AL.

Examiner

Victor MacArthur

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2004.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 11-20 is/are allowed.
6) ☒ Claim(s) 1-10 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 30 June 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “vacuum wall” (line 21 of claim 11) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claim 13 is objected to because of the following informalities:

- The limitation “further comprising release means” (line 1 of claim 13) is a double inclusion of the “release means” of line 18 of claim 11 and should be replaced with “wherein said release means is also”

Appropriate correction is required. For purposes of examining the instant invention, the examiner has assumed these corrections have been made.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Prescott (U.S.

Patent 2,712,769) (see marked-up drawing below).

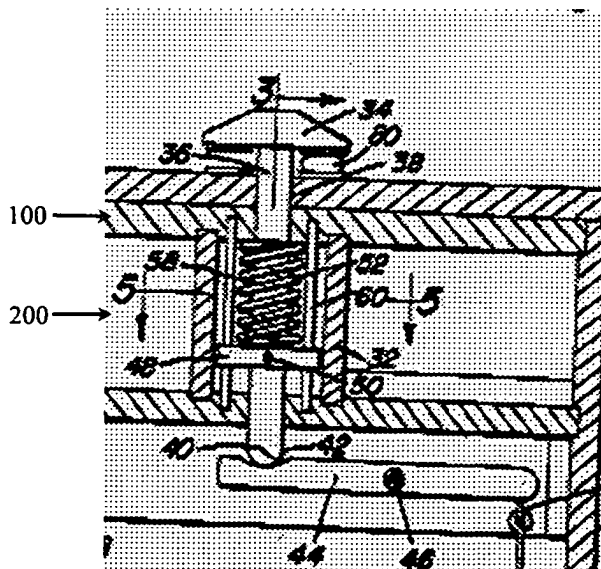


Figure 2

Art Unit: 3679

Claim 1. Prescott discloses (fig.2) an apparatus for clamping a reference surface (surface of 24 contacting 100) of an object (80, 24) to a reference surface (surface of 100 contacting 24) of a support member (100), comprising: at least one clamping member (200 of the marked-up figure above denotes a clamping member in as much as 100 of the applicant's drawings does) having means (52) for applying compressive force between a first contact surface (surface of 52 contacting 100) and a second contact surface (surface of 34 contacting 80), said first contact surface being in contact with a support surface (surface of 100 contacting 52) of said support member, said support surface of said support member being opposite said reference surface of said support member, each of said clamping members having a base member (34) with a contact area (area of 34 contacting 80) in contact with a support surface (surface of 80 contacting 34) of said object (80, 24), said support surface of said object being opposite said reference surface of said object, each of said clamping members having a tension member (36) passing through holes (hole in 100, hole in 24) in said support member and said object for applying a force to said base member and for supporting said object when said force is released, said tension member being adapted to maintain a tensile force (within itself between 48 and 34) and having a cross section adapted such that said tension member exerts transverse force (force applied to 80 is in a transverse direction with respect to 24) on said object less than a threshold amount (some amount greater than that supplied by 52, which might damage 80) in response to transverse displacements of said clamping member such that the deviation from an adjusted position is within a relevant error budget (any relevant error budget).

Art Unit: 3679

Claim 2. Prescott discloses that the means for applying compressive force is a spring (52) and said first contact surface is a surface of said spring.

Claim 3. Prescott discloses release means (44) for releasing compressive force.

Claim 4. Prescott discloses that the release means comprises a lever pressing (indirectly via 36 and 48) against the means for applying compressive force. Note that the lever (20) of the applicant's invention does not directly contact the spring (120).

Claims 5 and 6. Prescott discloses that support means (portion of 100 contacting 24) support the object when the compressive force is released.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prescott U.S. Patent 2712769 in view of Oguma U.S. Patent 6419536.

Claims 7-10. Prescott discloses that the tension member is a shaft (36). Prescott does not disclose that shaft has differing diameters. Oguma teaches (fig.2) a shaft (30) having a broader diameter at the top and bottom and a smaller diameter in a central area. Increasing the diameter of the top and bottom ends increases the strength of the ends of the shaft. It has generally been recognized that the optimization of proportions in a prior art device is a design consideration within the skill of the art. In re Reese, 290 F.2d 839, 129 USPQ 402 (CCPA 1961). The

Art Unit: 3679

applicant states (lines 5-9 of para.0038 of Detailed Description) that the shaft diameter dimensions “are not critical and may be adjusted”. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made modify the shape of the Prescott shaft such as to increase the top and bottom shaft diameters, as taught by Oguma, for the purpose of increasing the strength of the ends of the shaft, as such practice is a design consideration in the art.

Allowable Subject Matter

Claims 11-20 are allowed.

Claim 11. Prescott does not disclose opening a gap between said object (80, 24) and said support member (100), in fact it would appear that modifying (24) to separate from (100) would destroy the Prescott apparatus. If the Prescott object is taken to be element (80), as detailed in the 35 U.S.C. 102(b) rejection of claim 1 above and the 35 U.S.C. 103(a) obviousness rejection of claim 11 in the previous office action, then the newly added limitation “passing through holes in said support member and said object” (lines 10-11 of claim 11) could not be met. Further modifying Prescott to have through holes in element (80) would change the principle of operation of the Prescott apparatus (clamping braided strands) such that the teachings of any modifying references would not be sufficient to render claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 249 (CCPA 1959).

Claims 12-20 depend from claim 11 and are thus similarly allowed.

Response to Arguments

Applicant's arguments have been fully considered but the majority of arguments do not pertain to the claims as originally rejected. Rather, they regard newly added limitations and as such are considered to be moot in view of the current office action above. The remaining arguments are non-persuasive.

The applicant argues that Prescott and Oguma are not bodily incorporable. This is not persuasive. The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

The applicant argues that Prescott and Oguma are nonanalogous art. This is not persuasive since both Prescott and Oguma deal with load bearing shafts. It has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992).

The applicant argues that having a shaft with a diameter that narrows at the middle has the benefit of reduced stiffness at the center rather than increased strength at the ends. This is not persuasive since a shaft with thick ends and a narrow center inherently exhibits both the benefit of reduced stiffness at the center and increased strength at the ends (relative to a uniform shaft of medium diameter). The fact that applicant has recognized another advantage which

Art Unit: 3679

would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). Furthermore, the applicant states that the diameter of the shaft is not critical (lines 5-9 of para.0038 of Detailed Description) to the applicant's invention.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor MacArthur whose telephone number is (703) 305-5701. The examiner can normally be reached on 8:30am - 5:00pm.

Art Unit: 3679

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (703) 308-2686. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.



VLM

September 27, 2004



DANIEL P. STODOLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600